

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A method for distribution of a formatted data file having metadata and content in a system capable of point-to-multipoint communications, the method comprising:

transmitting the formatted data file from a sender to a plurality of receivers via a point-to-multipoint session;

retransmitting the metadata from the sender to the plurality of receivers via the point-to-multipoint session;

wherein retransmission of the metadata can occur at any time during the point-to-multipoint session.

2. (Currently amended) The method of claim 1, wherein transmitting the formatted data file further comprising transmitting the metadata at an earlier time location in the point-to-multipoint session than ~~[[it]]~~ they occur in the formatted data file.

3. (Currently amended) The method of claim 1, wherein ~~retransmitting~~ the formatted data file further comprises first transmitting the metadata and then transmitting the content.

4. (Original) The method of claim 1, wherein retransmitting the metadata occurs after transmitting the content.

5. (Original) The method of claim 1, wherein retransmitting the metadata comprises retransmitting the metadata a plurality of times.

6. (Original) The method of claim 1, wherein the formatted data file is transmitted in discrete packets each packet having a Source Block Number (SBN) and an

Encoding Symbol Identifier (ESI), wherein the sender retransmits packets containing metadata with the same SBN and ESI as corresponding originally transmitted metadata packets.

7. (Original) The method of claim 1, wherein the formatted data file and the retransmitted metadata are assigned different Transport Object Identifier (TOI) values.

8. (Original) The method of claim 1, wherein the plurality of receivers are informed by the sender that metadata repetition will be supported in the point-to-multipoint session.

9. (Original) The method of claim 8, wherein the sender informs the receivers that metadata repetition will be supported via Session Description Protocol (SDP) using a metadata repetition attribute.

10. (Original) The method of claim 9 wherein the metadata repetition attribute is communicated to the receivers as follows: a=metadata-repetition ("uri = <">URI<">)/(<*>))[*,repetitions = " %d] wherein URI is defined in RFC 2396 and %d is the number of repetitions.

11. (Original) The method of claim 1, further comprising using an FEC repair scheme in conjunction with metadata repetition.

12. (Original) The method of claim 1, further comprising using a point-to-point repair scheme in conjunction with metadata repetition.

13. (Currently amended) A method for distribution of a formatted data file having metadata and content in a system capable of point-to-multipoint communications, the method comprising:

transmitting the formatted data file from a sender to a plurality of receivers via a point-to-multipoint session; and

using FEC to allocate more redundancy to the metadata than is allocated to the content.

14. (Original) The method of claim 13 wherein FEC is used for only the metadata.

15. (Currently amended) A method for distribution of a formatted data file having metadata and content in a system capable of point-to-multipoint communications, the method comprising:

transmitting the formatted data file from a sender to a plurality of receivers via a point-to-multipoint session; and

using point-to-point data repair to repair errors in receipt of metadata wherein the receivers are restricted such that they can request metadata but not content via point-to-point repair.

16. (Currently amended) A method for distribution of a formatted data file having metadata and content in a system capable of point-to-multipoint communications, the method comprising:

transmitting the formatted data file from a sender to a plurality of receivers via a point-to-multipoint session; and

using point-to-point data repair to repair errors in receipt of metadata wherein the sender is restricted such that it can send metadata but not content via point-to-point repair.

17. (Original) A method for decreasing latency in playback of a formatted data file including metadata and content, the method comprising:

identifying all metadata in the formatted data file; and

transmitting the identified metadata to a plurality of receivers at an earlier time location than they occur in the original formatted data file in a point-to-multipoint transmission.

18. (Original) The method of claim 17 further comprising transmitting the metadata to the plurality of receivers at the beginning of the point-to-multipoint session and after

transmitting all metadata, transmitting the content to the plurality of receivers via the point-to-multipoint transmission session.

19. (Original) A system for distributing formatted data files having metadata and content via a point-to-multipoint session, the system comprising:

a sender device; and

a plurality of receiver devices;

wherein the sender device is configured to transmit the formatted data file to the plurality of receiver devices via the point-to-multipoint session; and

wherein the sender device is configured to retransmit the metadata to the plurality of receiver devices via the point-to-multipoint session at any time during the point-to-multipoint session.

20. (Currently amended) The system of claim 19 wherein the sender device is further configured to transmit the metadata at an earlier time location in the point-to-multipoint session than [[it]] they occur in the formatted data files.

21. (Original) The system of claim 19 wherein the sender device is further configured to first transmit the metadata and then transmit the content of the formatted data file.

22. (Original) The system of claim 19 wherein the sender device is further configured to retransmit the metadata to the plurality of receiver devices via the point-to-multipoint session a plurality of times.

23. (Original) The system of claim 19 wherein the sender device is configured to inform the plurality of receiver devices that metadata repetition will be supported in the point-to-multipoint session.

24. (Original) The system of claim 23, wherein the sender device is configured to

inform the receivers that metadata repetition will be supported via Session Description Protocol (SDP) using a metadata repetition attribute.

25. (Original) The system of claim 24 wherein the metadata repetition attribute is communicated to the receiver devices as follows: a=metadata-repetition ("uri = <">URI<">)/<*)[";repetitions =" %d] wherein URI is defined in RFC 2396 and %d is the number of repetitions.

26. (Original) The system of claim 19 further comprising means for implementing an FEC repair scheme in conjunction with metadata repetition.

27. (Original) The system of claim 19 further comprising means for implementing a point-to-point repair scheme in conjunction with metadata repetition.

28. (Original) A system for distributing formatted data files having metadata and content via a point-to-multipoint communications session, the system comprising:

a sender device; and

a plurality of receiver devices;

wherein the sender device is configured to use FEC to allocate more redundancy to the metadata than is allocated to the content.

29. (Original) The system of claim 28 wherein FEC is used for only the metadata.

30. (Original) A system for distributing formatted data files having metadata and content via a point-to-multipoint communications session, the system comprising:

a sender device; and

a plurality of receiver devices;

wherein the sender device is configured to use point-to-point data repair to repair errors in receipt of metadata; and

wherein the receiver devices are restricted such that they can request metadata but not content via point-to-point repair.

31. (Original) A system for distributing formatted data files having metadata and content via a point-to-multipoint communications, the system comprising:

a sender device;

a plurality of receiver devices;

wherein the sender device is configured to use point-to-point data repair to repair errors in receipt of metadata;

and wherein the sender device is restricted such that it can send metadata but not content via point-to-point repair.

32. (Original) A system for decreasing latency in playback of a formatted data file having metadata and content, the system comprising:

a sender device; and

a plurality of receiver devices;

wherein the sender device is configured for identifying all metadata in a formatted data file and transmitting the identified metadata to the plurality of receiver devices at an earlier time location than they occur in the formatted data file in a point-to-multipoint transmission session.

33. (Original) The system of claim 32 wherein the sender device is configured to transmit the metadata to the plurality of receiver devices at the beginning of the a point-to-multipoint transmission session before transmitting the content of the formatted data file to the plurality of receiver device.

34. (Original) A sender device for use in a system for distributing formatted data files having metadata and content, the sender device comprising:

means for sending a formatted data file to a plurality of receiver devices via a point-to-multipoint session;

means for retransmitting the metadata of the formatted data file to the plurality of receiver devices via a point-to-multipoint session;

wherein retransmission of the metadata can occur at any time during the point-to-multipoint session.

35. (Original) The sender device of claim 34 further comprising means for identifying all metadata in the formatted data file, wherein the means for sending is configured to send all of the metadata to the plurality of receiver devices at an earlier time location than they occur in the formatted data file.

36. (Original) The sender device of claim 35 wherein the sender device is configured to transmit all of the metadata to the plurality of receiver devices before beginning to send the content of the formatted data file to the plurality of receiver devices.

37. (Original) The sender device of claim 34 wherein the means for retransmitting is configured to retransmit the metadata to the plurality of receiver devices via the point-to-multipoint session a plurality of times.

38. (Original) The sender device of claim 34 wherein the sender device further includes means for informing the plurality of receiver devices that metadata repetition will be supported in the point-to-multipoint session.

39. (Original) The sender device of claim 38, wherein the sender device is configured to inform the receiver devices that metadata repetition will be supported via Session Description Protocol (SDP) using a metadata repetition attribute.

40. (Original) The sender device of claim 39 wherein the metadata repetition attribute is communicated to the receiver devices as follows: a=metadata-repetition ("uri = <">URI<">)/(<*>))[",repetitions =" %d] wherein URI is defined in RFC 2396 and %d is the number of repetitions.

41. (Original) The sender device of claim 34 further comprising means for implementing an FEC repair scheme in conjunction with metadata repetition.

42. (Original) The sender device of claim 34 further comprising means for implementing a point-to-point repair scheme in conjunction with metadata repetition.

43. (Original) A sender device for use in a system for distributing formatted data files having metadata and content, the sender device comprising:
means for sending a formatted data file to a plurality of receiver devices via a point-to-multipoint session;
means for implementing FEC to allocate more redundancy to the metadata than is allocated to the content.

44. (Original) The sender device of claim 43 wherein the means for implementing is configured to use FEC only for the metadata.

45. (Original) A sender device for use in a system for distributing formatted data files having metadata and content, the sender device comprising:
means for sending a formatted data file to a plurality of receiver devices via a point-to-multipoint session;
means for implementing point-to-point data repair to repair errors in receipt of metadata wherein means for sending is restricted such that it can send metadata but not content via point-to-point repair.

46. (Currently amended) A computer code product embodied on a computer-readable medium comprising:
computer code configured to:
transmit a formatted data file including metadata and content from a sender device to a plurality of receiver devices via a point-to-multipoint session;
retransmit the metadata to the plurality of receiver devices via the point-to-multipoint session at any time during the point-to-multipoint session.

47. (Original) The computer code product of claim 46 further comprising computer code configured to transmit the metadata of the formatted data file at an earlier time location than they occur in the original formatted data file.

48. (Original) The computer code product of claim 47 wherein the computer code is configured to transmit the metadata of the formatted data file before transmitting the content of the formatted data file.

49. (Original) The computer code product of claim 46 further comprising computer code configured to retransmit the metadata after first transmitting the metadata and content of the formatted data file.

50. (Original) The computer code product of claim 46 wherein the computer code is configured to retransmit the metadata a plurality of times.

51. (Original) The computer code product of claim 46 wherein the computer code is configured to inform the plurality of receiver devices that metadata repetition will be supported in the point-to-multipoint session.

52. (Original) The computer code product of claim 51, wherein the computer code is configured to inform the receiver devices that metadata repetition will be supported via Session Description Protocol (SDP) using a metadata repetition attribute.

53. (Original) The method of claim 52 wherein the metadata repetition attribute is communicated to the receiver devices as follows: a=metadata-repetition ("uri = <">URI<">)<*>)[*,repetitions = " %d] wherein URI is defined in RFC 2396 and %d is the number of repetitions.

54. (Original) The computer code product of claim 46 wherein the computer code is further configured to implement an FEC repair scheme in conjunction with metadata repetition.

55. (Original) The computer code product of claim 46 wherein the computer code is further configured to implement a point-to-point repair scheme in conjunction with metadata repetition.

56. (Currently amended) A computer code product embodied on a computer-readable medium comprising:

computer code configured to:

transmit a formatted data file including metadata and content from a sender device to a plurality of receiver devices via a point-to-multipoint session; and

use FEC to allocate more redundancy to the metadata than is allocated to the content.

57. (Original) The computer code product of claim 56 wherein FEC is used for only the metadata.

58. (Currently amended) A computer code product embodied on a computer-readable medium comprising:

computer code configured to:

transmit a formatted data file including metadata and content from a sender device to a plurality of receiver devices via a point-to-multipoint session; and

use point-to-point data repair to repair errors in receipt of metadata wherein the receiver devices are restricted such that they can request metadata but not content via point-to-point repair

59. (Currently amended) A computer code product embodied on a computer-readable medium comprising:

computer code configured to:

transmit a formatted data file including metadata and content from a sender device to a plurality of receiver devices via a point-to-multipoint session; and

use point-to-point data repair to repair errors in receipt of metadata wherein the sender device is restricted such that it can send metadata but not content via point-to-point repair.

60. (Currently amended) A computer code product embodied on a computer-readable medium comprising:

computer code configured to:

identify all metadata in a formatted data file including metadata and content; and

transmit the identified metadata at an earlier time location than they occur in the formatted data file in a point-to-multipoint transmission session.

61. (Original) The computer code product of claim 60 comprising computer code configured to transmit the identified metadata at the beginning of a point-to-multipoint transmission session before transmission of the content.